

**Notice of Allowability**

Application No.

09/902,583

Examiner

Kaveh Abrishamkar

Applicant(s)

NAITOH, HISAO

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Request for Continued Examination filed on 10/04/2006.
2. ☒ The allowed claim(s) is/are 1,2,6,8,11 and 15-18.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 12/20/2006.

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other \_\_\_\_\_

  
AYAZ SHEIKH

**SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Thomas L Jones (Reg. No. 53,908) on 12/20/2006.
3. The application has been amended as follows:

#### Claim 11 (Currently Amended):

An infection information providing system apparatus for detecting a computer virus in transmitted and received information and providing infection information concerning the detected computer virus, comprising a processor capable of performing operations of:

installing anti-virus software on a central apparatus;

storing communication history of the information of a terminal apparatus;

registering a time of find-out, which is a time when the computer virus was found out;

specifying a time of infection of [a] the terminal apparatus based on the stored communication history, the registered time of find-out, and a time of installation of the

Art Unit: 2131

anti-virus software, in response to detection, by the installed anti-virus software, of the computer virus in received information;

specifying a route of infection of the computer virus based on the stored communication history and the time of installation of the anti-virus software; and

transmitting the infection information, including the specified time of infection and the specified route of infection, to the [outside] terminal apparatus.

Claim 15 (Currently Amended):

A computer memory product readable by a computer and storing a computer program used by a central apparatus for detecting a computer virus in transmitted and received information between the central apparatus and a terminal apparatus and providing infection information concerning the detected computer virus, the computer program comprising the steps of:

storing a communication history of the [information] terminal apparatus;

registering a time of find-out, which is a time when the computer virus was found out;

specifying a time of infection of the terminal apparatus based on the stored communication history, the registered time of find-out, and a time of installation of anti-virus software on the central apparatus, in response to detection, by the anti-virus software, of the computer virus in received information; [and]

specifying a route of infection of the computer virus based on the stored communication history and the time of installation of the anti-virus software; and

transmitting the infection information, including the specified time of infection and the specified route of infection, from the central apparatus to the terminal apparatus.

Claim 17 (Currently Amended):

An infection information providing apparatus for detecting a computer virus in information transmitted to and received from the outside and providing infection information concerning the detected computer virus, comprising:

means for installing anti-virus software on a central apparatus;

means for storing a communication history of the information of a terminal apparatus;

means for registering a time of find-out, which is a time when the computer virus was found out;

means for specifying a time of infection of [a] the terminal apparatus based on the stored communication history, the registered time of find-out, and a time of installation of the anti-virus software, in response to detection, by the installed anti-virus software, of a computer virus in the information received from the outside;

means for specifying a route of infection of the computer virus based on the stored communication history and the time of installation of the anti-virus software; and

means for transmitting the infection information, including the specified time of infection and the specified route of infection, to the [outside] terminal apparatus.

***Allowable Subject Matter***

5. Claims 1,2, 6, 8, 11, and 15-18 are allowed.

6. The following is an examiner's statement of reasons for allowance:

7. The above mentioned claims 1,2, 6, 8, 11, and 15-18 are allowable because the CPA (Cited Prior Art), Conklin et al. (U.S. Patent 5,991,881), of record fails to teach or render obvious the claimed limitations in the independent claims 1, 2, 11, and 15-18, and subsequent dependent claims.

The CPA, in particular, does not teach nor suggest a system, method, or an apparatus which stores a communication history of a terminal apparatus, and based on this communication history and a registered time of find-out, and a time of installation of an anti-virus software on a central apparatus, a time of infection is specified and transmitted to the terminal apparatus, along with a route of infection.

The present invention addresses the following drawbacks of prior art virus detection mechanisms:

1) the lack of a report of a precise time of infection using both the time of find-out and the time of installation of anti-virus software.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

Art Unit: 2131

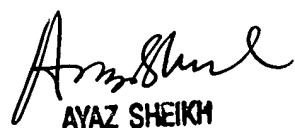
accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaveh Abrishamkar whose telephone number is 571-272-3786. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Y.A.  
KA  
12/20/2006

  
AYAZ SHEIKH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100